

MAKEYEV, Z.A.

Makeyev, Z.A. "Principles of regionalization of karst areas from the point of view of engineering geology", In the collection: Karstovedeniye, Issue 4, Molotov, 1948, p. 43-45.

SO: U-3042, 11 March 53, (Letopis 'nykh Statey, No. 9, 1949)

NAKIEV, Z. A.

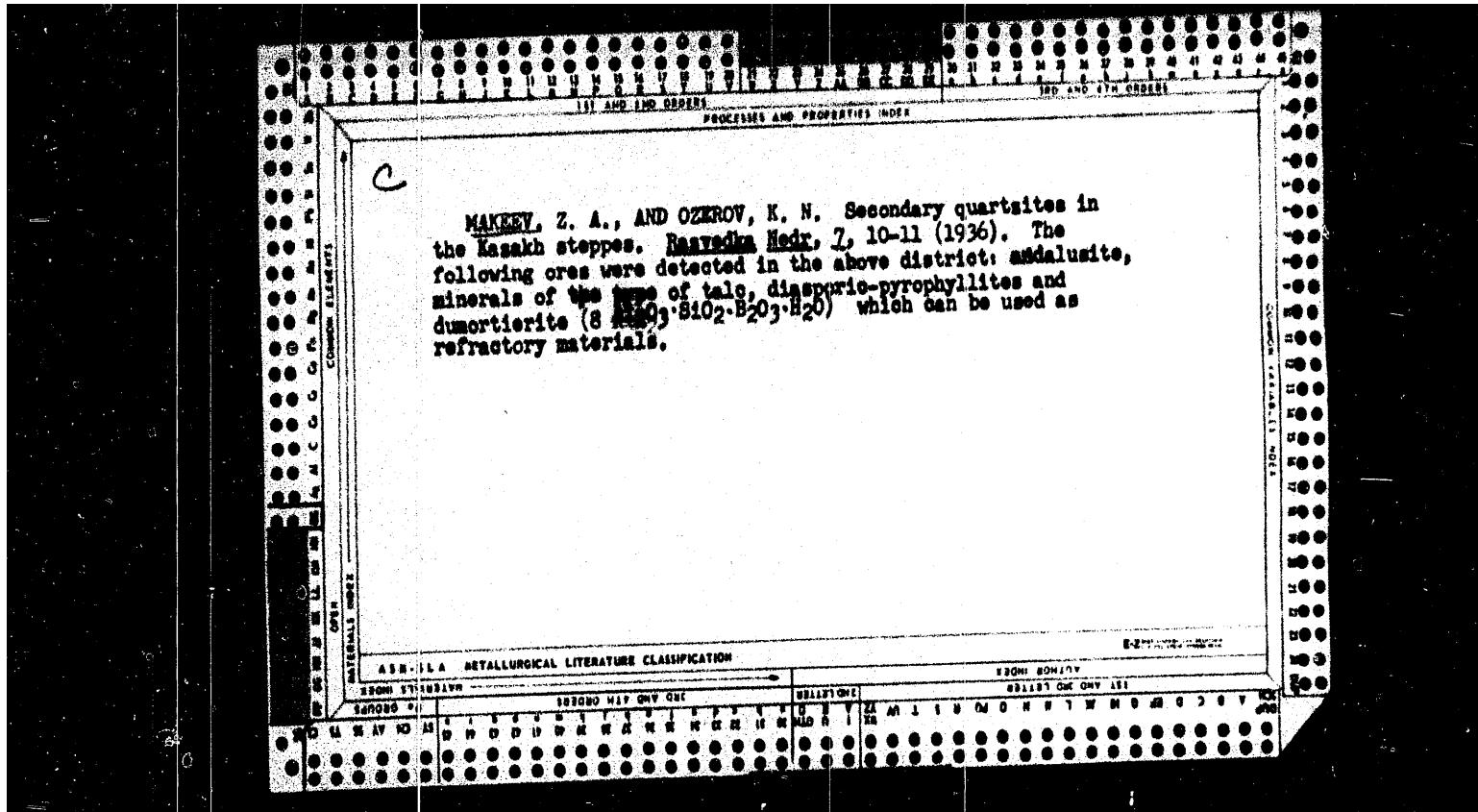
Depth distribution and shifting of underground waters. p. 28.

A paper found in the symposium "Works of the Laboratory of hydro ecological Problems imeni. F. P. Savarenkiy", Vol. III (1948). Moscow-Leningrad.

MAKEEV, Z. A.

MAKEEV, Z. A. Osnovnye tipy rel'efa zemnoi poverkhnosti v izobrazhenii na kartakh. Moskva,  
Izd-vo geodez. i kartograf. lit-ry, 1945. 153 p. illus. 25 cm. "Literatura": p. 154  
InU NN NNC DLC: QE501.M25

SO: LC, Soviet Geography, Part 1, 1951, Uncl.



CHEKMAREV, I.A., kand. tekhn. nauk; CHUYKO, P.I., inzh.; SOKURENKO, V.P., inzh.;  
ROKUTOV, V.P., inzh.; MAKEYEV, Yu.B., inzh.

Method of studying the properties of metalworking lubricants  
during the hot rolling of pipe on a long mandrel. Proizv. trub  
no.11:40-46 '63.  
(MIRA 17:11)

MONIN, G.I.; MAKEYEV, Ye.B.; IZYGZON, N.B.

Basis of a method for faster calculation of monolithic underground constructions for workings having a large cross section. Trudy TSNII Podzemshakhtstroia no.1:157-178 '62.

(MIRA 16:8)

(Mine timbering)

MAKEYEV, Ye.

Hal'isev's tillage system overcomes drought. Zemledelie 27 no. 11:73-74  
N '65. (MIRA 18:10)

1. Predsedatel' kolkhoza imeni Chapayeva, Shadrinskogo rayona,  
Kurganskoy oblasti.

MAKEYEV, V.Y.

Pregnancy in thrombophlebitic splenomegaly. Akush. i gin. 40  
no. 3:122-124 My-Je '64. (MIRA 18:6)

1. Otdeleniye patologii beremennosti (zav. - prof. S.M.Bekker)  
Instituta skusherstv i ginekologii (dir. - prof. M.A.Petrov-  
Maslakov) AMN SSSR, Leningrad.

L 18029-66

ACC NR: A 600701Z

3

factor (or absorption coefficient). The amplification factor was measured with an absolute error of approximately 0.4%. The measurements were made in a helium-neon gas discharge. The pressure in the discharge tube was held at approximately 3.5 mm Hg with a helium:neon partial pressure ratio of 8:1. The power of the high frequency discharge was approximately 250 W. The tabulated results indicate lines which may be used for laser emission. "In conclusion, the authors are grateful to L. N. Deryugin for interest in the work." Orig. art. has: 1 figure, 1 table. [14]

SUB CODE: 20/ SUBM DATE: 10May65/ ORIG REF: 003/ OTH REF: 003/ ATD PRESS:

4212

Card 2/2

vmb

L 18029-64  
 ACC NR: A 6007012 FBD/EWT(1)/EEC(k)-2/T/EMP(k)/EM(h) IJP(c) IC/MW/GG  
 SOURCE CODE: UR/0051/66/020/002/0342/0344  
 AUTHOR: Cheremiskin, I. V.; Makeyev, V. S.; Sobolev, I. V.  
 ORG: none

TITLE: Experimental determination of the light amplification factor in a gas discharge

SOURCE: Optika i spektroskopiya, v. 20, no. 2, 1966, 342-344

TOPIC TAGS: gas discharge, gas laser, laser emission, helium neon laser

ABSTRACT: The authors study the coefficient of light amplification in a gas discharge using a source with a continuous emission spectrum for modulating the discharge and a receiver consisting of a spectroscope, a photomultiplier, and a synchronous detector. A brief description of the experimental equipment is given. The intensity of spontaneous emission on the line being studied was measured and used as the initial value for the signal reading. The light source was then switched on and amplified by population inversion in the discharge tube or attenuated in the absence of population inversion. For small amplification factors (or absorption coefficients) the change in the indicator readings is proportional to the amplification

Card 1/2

UDC: 621.375.9 : 534

DMITRIEVA, A.I.; SHUSHKIN, A.A.; MIRONOV, K.M.; DERBENEV, S.I.;  
GRANICHNOVA, Z.P.; OKUN', M.M.; MIKHAYLOVA, N.N.; ANDREYEV,  
V.V.; MAKEYEV, V.S.; OSIPOVA, V.M.; L'VOVII, V.S.;  
SMIRNOV, G.N., nauchnyy sotr.; ZAIKIN, I.N.; TAL'NISHNIKH,  
G.N.; MORKOVIN, V.A.; GALAGAN, V.A.; RAZUVAYEV, A.A., red.;  
SOKOLOVA, V.Ye., red.; TRISHINA, L.A., tekhn. red.

[Manual on the industrial primary processing of flax]  
Spravochnik po zavodskoi pervichnoi obrabotke l'na. Izd.2.,  
perer. i dop. Moskva, Rostekhizdat, 1962. 755 p.  
(MIRA 15:12)

1. TSentral'nyy nauchno-issledovatel'skiy institut lubyanikh volokon (for Dmitriyeva, Shushkin, Mironov, Derbenev, Granichnova, Okun', Mikhaylova, Andreyev, Makeyev, Osipova).
  2. Vsesoyuznyy nauchno-issledovatel'skiy institut okhrany truda (for Smirnov). 3. Upravleniye zagotovk i pervichnoy obrabotki l'na Kalininskogo sovnarkhoza (for Zaikin, Tal'nishnikh, Morkovin, Galagan, L'vovyy).
- (Flax) (Flax processing machinery)

MARKOV, Valentin Vasil'yevich; SUSLOV, Nikolay Nikolayevich; TRIFONOV,  
Vadim Georgiyevich; ANDREYEV, V.V., retsenzent; ARIFKHANOV,  
U.Kh., retsenzent; ARNO, A.A., retsenzent; DERBENEV, S.I.,  
retsenzent; SHUSHKIN, A.A., retsenzent; MAKAYEV, V.S., nauchnyy  
red.; DUKHOVNYY, F.N., red.; SHAPENKOVA, T.A., tekhn. red.

[Primary processing of bast fibers] Pervichnaya obrabotka  
bianyakh volokon. Moskva, Gos. izd-vo "Rostekhizdat," 1961.  
(MIRA 15:4)

463 p.

(Textile fibers)

(Textile machinery)

MAKEYEV, V.S.

V.G. Trifonov's article "Evaluation of retted flax straw."  
Izv.vys.ucheb.zav.; tekhn.tekst.prom. no.1:176-178 '59.  
(MIRA 12:6)

1. Laboratoriya pervichnoy obrabotki l'na TSentral'nogo nauchno-  
issledovatel'skogo instituta lesosplava.  
(Flax) (Retting) (Trifonov, V.G.)

ANDREYEV, Vladimir Vladimirovich; SEREGIN, Aleksandr Sergeyevich;  
MAKEYEV, V.S., red.; GORDEYCHIK, G.M., red.; MEDVEDEV,  
L.Ya., tekhn.red.

[The MT-100-L scutching and hackling machine] Mial'no-  
trepal'nyi agregat MT-100-L. Moskva, Gos.nauchno-tekhn.  
izd-vo lit-ry po legkoi promyshl., 1958. 68 p. (MIRA 12:6)  
(Flax processing machinery)

MAKEYEV, V.S., Cand Tech Sci -- (diss) "Certain problems  
of a theoretical and experimental study of the ~~production~~  
of brake machines with spiral grooved rollers." Mos, 1958,  
19 pp (Min of Higher Education USSR. Mos Textile Inst)  
150 copies (KL, 42-58, 116)

~~MAKEYEV, V.S.~~, inzhener.

Adjusting fiber speed in steam breakers. Tekst.prom. 17 no.9:12-15  
(MIRA 10:11)  
S '57. (Hemp) (Textile machinery)

KAPITANOV, Yuriy Dmitriyevich, dots., kand. tekhn. nauk;  
MAKEYEV, Valentin Nikoleyevich, dots., kand. tekhn.  
nauk; SAVEL'YEV, Petr Petrovich, dots., kand. ekon.  
nauk; VARENIK, Yevgeniy Ivanovich, prof., doktor tekhn.  
nauk; CHERNOV, T.P., prof., retsentent; ZOLOTNITSKIY,  
N.D., prof., doktor tekhn. nauk, retsentent; POPOVA,  
N.N., red.

[Technology of the construction industry] Tekhnologiya  
stroitel'nogo proizvodstva. Moskva, Vysshiaia shkola,  
1965. 586 p. (MIRA 18:7)

1. Zaveduyushchiy kafedroy tekhnologii stroitel'nogo  
proizvodstva Moskovskogo inzhenerno-stroitel'nogo insti-  
tuta im. V.V.Kuybysheva (for Chernov).

MAKEYIV, V.N., kand.tekhn.nauk; KHAVASH, Yudit, kand.tekhn.nauk;  
SELESH DEZHE, inzh.

Mechanization of finishing operations in Hungary. Mekh.stroi.  
16 no.11:29-30 N '59. (MIRA 13:5)  
(Hungary--Building--Tools and implements)

PUSHKAREV, V.V., kand.tekhn.nauk, dotsent; MAKEYEV, V.N., inzh.-ekon.  
Economic efficiency of measures on increasing productivity of  
cranes in mounting large-panel buildings. Trudy MIEI no.9:311-327  
'58. (MIRA 11:6)  
(Cranes, derricks, etc.)

MAKEYEV, V.N., assistant

Work organization in erecting large-panel apartment houses. Mauch.  
dokl.vys.shkoly; stroi. no.1:251-258 ' 58. (MIRA 12:1)

1. Rekomendovana kafedroy stroitel'nogo proizvodstva Moskovskogo  
inzhenerno-ekonomiceskogo instituta imeni Sergo Ordzhonikidze.  
(Apartment houses) (Hoisting machinery)

MAKEYEV, V. N. Cand Tech Sci -- (diss) "The organization of labor during the  
assembling <sup>of</sup> of large-panelled buildings." Mos, 1958. 15 pp (Min of Higher  
Education USSR. Mos Engineering Economics Inst im Sergo Ordzhonikidze),  
110 copies. List of author's works, p 15 (11 titles) (KL, 13-58, 96)

MAKSYEV, V.N., inzhener.

Self-balancing grabbing devices. Biul. stroi. tekhn. 14 no. 4:18-20  
Ap '57. (MIRA 10:6)

1. Moskovskiy inzhenerno-ekonomicheskiy institut im.  
Sergo Ordzhonikidze.  
(Hoisting machinery)

Makayev)

MAKEYEV, V. inzh.

Using assembling and hoisting equipment. Gor. i sel'. stroi. no. 11:  
13-16 N '57. (MIRA 11:1)  
(Hoisting machinery)

99-5-7/11

Experimental Construction of Dams Protecting the River Banks by Using Heavy-Weight Broken Stones

and repair.

The article contains 2 figures, and 2 illustrations.

AVAILABLE: Library of Congress

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MAKeyev, V.N.

AUTHOR: Makeyev, V.N., Engineer 99-5-7/11  
TITLE: Experimental Construction of Dams Protecting the River Banks  
by Using Heavy-Weight Broken Stones (Opyt stroitel'stva  
beregozashchitnykh damb s oblitsovkoj rvanym kamnem tyazhelogo  
vesa)  
PERIODICAL: Gidrotekhnika i Melioratsiya, 1957, # 5, p 43-46 (USSR)

ABSTRACT: Floods of the Kara-Dar'ya river had caused considerable damage during the past years. In 1952, 323 hectares of farm land were washed away, and farm buildings and irrigation system structures were destroyed. Protection of farm lands and settlements by a number of dams built of timber and stones proved to be inadequate. In 1953, the building of new dams along the river banks was started. The length of dams varied from 100 to 700 m, in order to protect sections along the river which are subjected to erosion. From 1953 to 1956, 5 dams consisted of gravel of the valley, reinforced with a 1 m thick layer of heavy broken stones (in sizes from 0.2 to 1.5 cu m). High waters during 1954-56 have had hardly any effect on the new dams, and no repair work was required. The use of heavy broken stones for building protective dams showed several advantages, such as mechanization of construction, durability and easy maintenance.

MAKEYEV, V. N.

MAKEYEV, V.N., inzh.-ekonomist

New clamping devices used in erecting precast reinforced concrete  
components. Trudy MIEI no.8:160-165 '57. (MIRA 10:12)  
(Precast concrete construction)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031500017-6

~~MAKEYEV, V. inghener.~~

New design for scaffoldings. Stroitel' 2 no.11:22 N '56.  
(Scaffolding) (MIRA 10:1)

MAKEYEV, V.M.

Biology of Vipera ursini of the Chu-Ili Plateau. Zool.  
zhur. 43 no.11:1726-1727 '64. (MIRA 18:11)

1. Moskovskiy gosudarstvennyy pedagogicheskiy institut  
imeni Lenina.

MAKEYEV, V. G.

Bee Culture

Caring for bees in the Voroshilov Collective Farm's apiary. Pchelovodstvo 29  
No. 1, 1952.

9. Monthly List of Russian Accessions, Library of Congress, May <sup>2</sup> 1952, Uncl.

G  
MAKEYEV, V. and others  
A

Bee Culture

Brochure on the work of leading apiarists ("Collective Farm Apiaries." V. Makeyev, and others. Reviewed by G. F. Bukharov.) Pchelovodstvo, No. 2, 1952.

9. Monthly List of Russian Accessions, Library of Congress, May 1952, Uncl.

GIMEL'FARB, Ye. I.; MAKAYEV, V.F.

Prospects for the development of beet sowing in the Kharkov Economic  
Region. Sakh.prom. 32 no.9:51-55 S '58. (MIRA 11:11)

1. Khar'kovskiy sakhaveklotrest.  
(Kharkov Province--Sugar beets)

MAKEYEV, V.D.

Treatment of superficial fungal diseases of the skin with i-nitrotoluene preparation. Vest. derm. i vena. 37 no.6:36-38  
Je '63. (ZIR. 1:6)

1. Iz kozhnogo otdeleeniya Kronshtadtskoy polikliniki (glavnyy vrach A.A. Zubanova, nauchnyy rukovoditel' doktor-korrespondent AMN SSSR prof. P.V. Kozhevnikov).

MAKEYEV, V.D., kand.med.nauk; KOPOSOV, N.A.; USOV, D.V.

Surgical scrub. Vest.khir. no.6:119-120 '61. (MIRA 15:1)

1. Iz voyennogo gospitalya i kafedry voyenno-morskoy khirurgii  
(nach. - prof. A.A. Bocharov) Voyenno-meditsinskoy ordena  
Lenina akademii im. S.M. Kirova.

(SURGERY, ASEPTIC AND ANTISEPTIC)

NAKHEYEV, V.D.

Treatment of epidermophytosis with TNT preparations. Vest.derm.  
1 ven. 34 no. 3:29-33 My-Je '60. (MIRA 13:10)  
(TOLUENE) (RINGWORM)

MAKEYEV, V. D.

Treatment of certain skin diseases with implanation of preserved tissue. Vest. vener., Moskva no.2:15-17 Mar-Apr 1952.  
(CLML 22:2)

l. Kronshtadt.

MAKEYEV, V.

PA 239T48

USSR/Electronics - Instruments Jan 52

"An Instrument for Checking Clocks," V. Makeyev  
and V. Savochkin

"Radio" No 1, pp 18-20

One of the plants of the Min of Machine-and  
Instrument-Building has developed an instrument  
the PPCh-4) which permits one to check the daily  
course of clocks in 30 seconds. It consists of a  
crystal-controlled vacuum-tube oscillator, a fre-  
quency divider, a power amplifier, a recording  
unit, a pulse amplifier and a thyratron converter

239T48

MAKHYEV, V.; FILIPPOV, V.

Experience of Amur River boatmen in their efforts to make their work  
profitable. Mor.i rech.flot 14 no.4:10-12 Ap '54. (MIRA 7:5)  
(Amur River--Shipping) (Shipping--Amur River)

GRIGOROV, N.D., kand. ekon. nauk; DEMIDOVA, L.A., kand. ekon. nauk; LEGKOSTUP, I.M., kand. ekon. nauk; MAKHIEV, T.M., kand. ekon. nauk; TERESHINA, N.Ya., kand. ekon. nauk; LIZINA, A.I., kand. ist. nauk; BURDAKOVA, A.P.; BELYAYEV, Yu.B., prepodavatel' vysshikh uchebnykh zavedeniy; LYUBIN, V.A., prepodavatel' vysshikh uchebnykh zavedeniy; IVANOV, N.A., lektor; KUZ'MICHENOV, V.S., lektor; SUBBOTIN, P.M., lektor; RAPPORPORT, G., red.; GRIN', Ye., tekhn. red.

[Development of the economy and culture of the Altai Territory during 40 years of the Soviet regime] Razvitiye ekonomiki i kul'tury Altayskogo kraia za 40 let sovetskoi vlasti. Barnaul, Altaiskoe knizhnoe izd-vo, 1957. 229 p. (MIRA 11:5)

1. Zaveduyushchiy krayzdravotdelom Altayskogo kraya (for Burdakova).
2. Altayskiy kraykom Kommunisticheskoy partii Sovetskogo Soyuza (for Ivanov, Kur'michev, Subbotin).  
(Altai Territory--History)

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MAKEYEV, S.V.

Expansion of railroad transportation in the Polish People's Republic.  
Zhel.dor.transp. 44 no.3:79-82 Mr '62. (MIRA 15:3)  
(Poland--Railroads)

MAKEEV, S.N.

Book of V.M. Chupakhina ("Production of tin containers for canning"  
by V.M. Chupakhina. Reviewed by S.N. Makeev). Kons. i ov. prom. 12 no.2t  
42-43 F '57. (MLRA 10:6)  
(Containers) (Canning and preserving--Equipment and supplies)  
(Chupakhina, V.M.)

CHUPAKHIN, V.M., inzhener; MAKEYEV, S.N., redaktor; KHLATINA, Ye.S., redaktor;  
KISINA, Ye.I., tekhnicheskiy redaktor.

[Manufacturing varnished seamless cans on a modernized press; work  
practice of the Farmu and Baltic fish canning plants] Proizvodstvo  
lakirovannykh tsel'noshtampovannykh banok na modernizirovannom pres-  
se; iz opyta raboty Piarnuskogo i Baltiskogo rybokonservnykh zavo-  
dov. Moskva, Pishchepromizdat, 1956. 33 p. (MLRA 9:6)  
(Containers) (Sheet-metal work)

MAKEYEV, S.N.

LOKSHIN, Ya.Yu.; BERSHADSKIY, G.Yu.; ZHMBROVSKIY, V.V.; MURAVIN, Ya.G.;  
MAKEYEV, S.N., inzhener, redaktor; KOLESNIKOVA, P.Yu., inzhener,  
retsenzent; ADAMOVSKIY, I.I., inzhener, retsenzent; PRITYKINA,  
L.A., redaktor; GOTLIB, E.M., tekhnicheskiy redaktor

[Lacquering and printing in tin can production] Lakirovanie i  
pechatanie v zhestianobanochnom proizvodstve. Moskva, Pische-  
promizdat. 1954. 299 p.  
(MLRA 8:5)  
(Container industry)

MARMOL'-REBUEL'TA, L.Ye., inzh.; BRITAN, Yu.M., inzh.; MAKEYEV, S.A.,  
red.; KAMYSHNIKOVA, A.A., tekhn. red.

[Inventions; motion pictures, photography, optics]Sbornik izo-  
bretenii; kino, foto, optika. Moskva, Tsentral'noye biuro tekhn. in-  
formatsii, 1962. 145 p. (MIRA 15:12)

1. Russia (1923~ U.S.S.R.)Komitet po delam izobreteniyy i ot-  
krytiy.

(Motion pictures--Technological innovations)  
(Photography--Technological innovations)  
(Optics--Technological innovations)

MAKEYEV, R.P., aspirant

Application of linear algebra to theoretical and practical problems  
of geodetic adjustment in foreign literature. Trudy MIIGAIK no.41:  
81-93 '60. (MIRA 13:11)

1. Kafedra geodezii Moskovskogo instituta inzhenerov geodezii,  
aerofotos"zemki i kartografii.  
(Matrices) (Calculus of tensors)  
(Surveying--Tables, etc.)

4(4)  
AUTHOR:

Makeyev, R. P., Junior Research Assistant

SOV/154-58-6-18/22

TITLE:

Foreign Publications on the Application of the Matrix Theory to  
the Field of Compensation Computations (Zarubezhnaya literatura  
o primenenii teorii matriits v oblasti uravnitel'nykh  
vychisleniy)

PERIODICAL:

Izvestiya vysshikh uchebnykh zavedeniy. Geodeziya i  
aerofotos"yemka, 1958, Nr 6, pp 149-152 (USSR)

ABSTRACT:

This is a list compiled according to the Referativnyy zhurnal  
Akademii Nauk SSSR (Periodical of Reports of the Academy of  
Sciences, USSR), and publication references in articles, con-  
taining 64 foreign papers including 25 listed in the Periodical  
of Reports 1954-57, and 39 papers from publication catalogs.  
The list is incomplete. The Soviet literature, and the foreign  
literature translated into Russian, are not indicated.

ASSOCIATION:

Moskovskiy institut inzhenerov geodezii, aerofotos"yemki i  
kartografii (Moscow Institute for Geodesy, Air Survey and  
Cartography Engineers)

Card 1/2

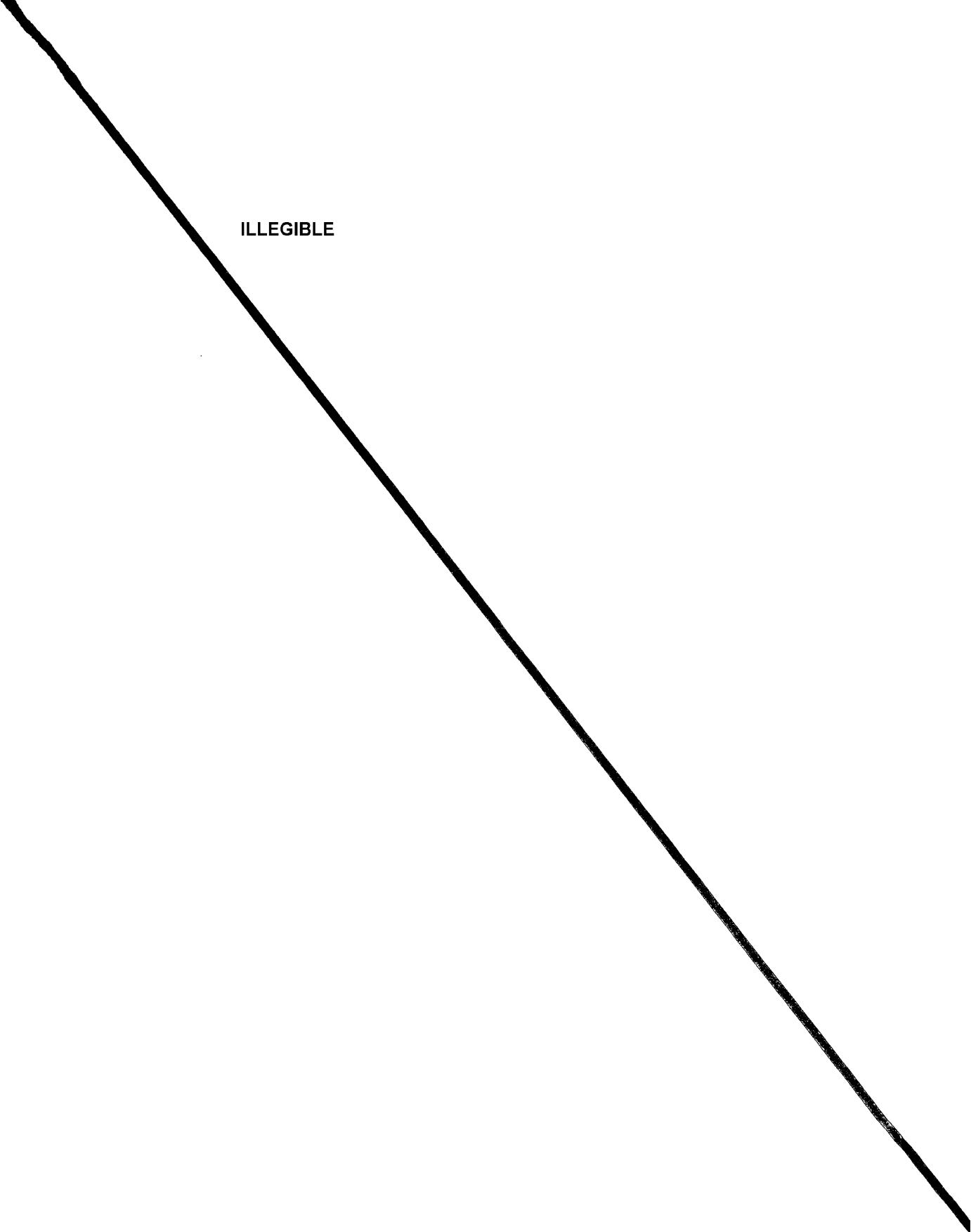
MAKEYEV, R.F.

Reconnaissance in regions of Kustanay Province. Ogod.1 kart.  
no.10:55-60 D '56. (MLRA 10:2)

(Kustanay Province--Triangulation)

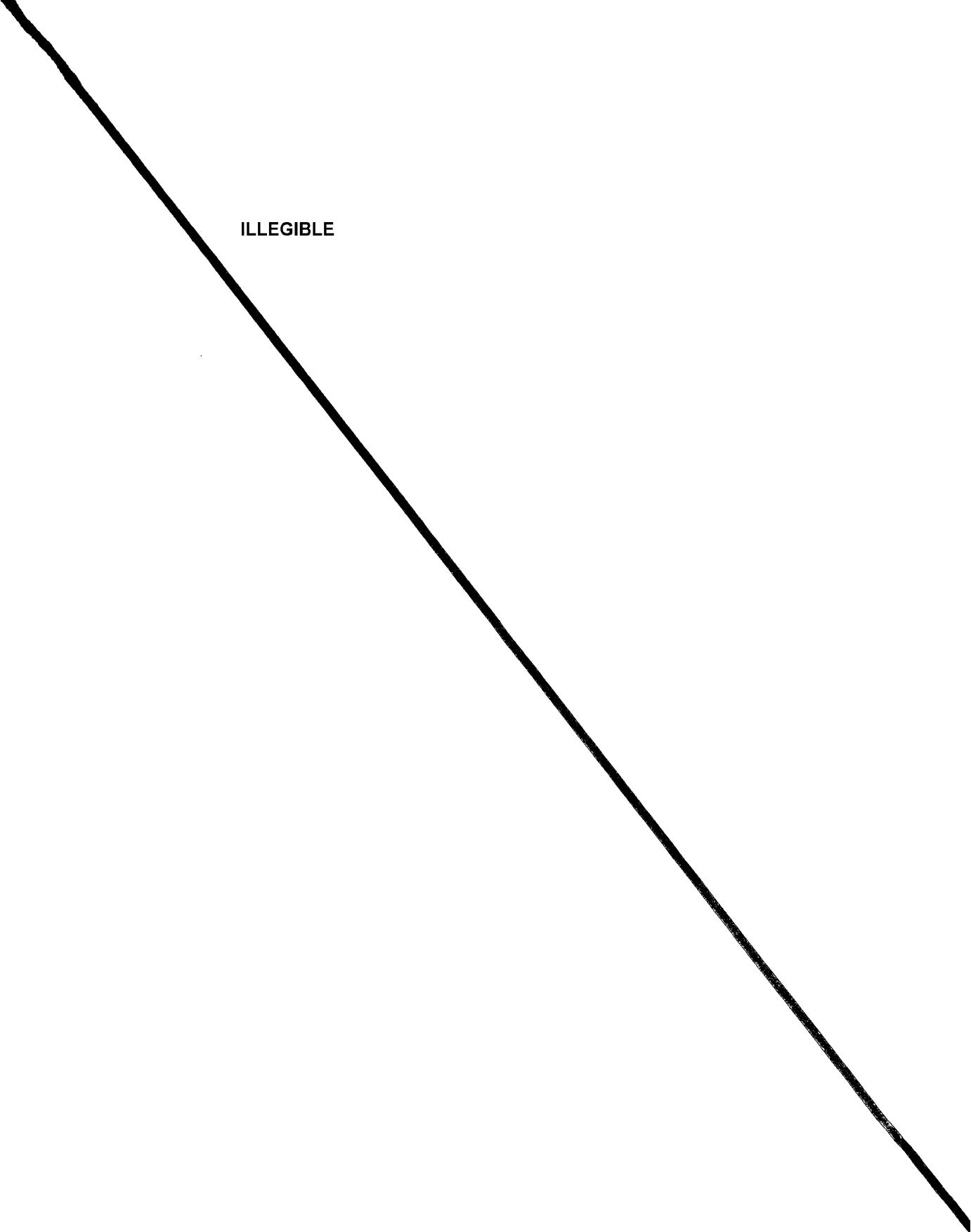
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METHIA, D.M., INSTITUTE,

Efficient scheme for supplying steam to plants of the  
rubber industry. Prem.energ. 12 no.9:15-17 S '57. (MIRA 10:10)  
(Steam engineering)

MAKEYEV, V.D. (Leningrad); KASHKIN, P.N., prof., rukovoditel' raboty;  
KOZHEVNIKOV, P.V., prof., rukovoditel' raboty

Antibacterial activity of the preparation TNT. Vest. derm. i  
ven. no.5:56-60 '65. (MIRA 18:31)

1. Chleny-korrespondenty AMN SSSR (for Kashkin, Kozhevnikov).  
Submitted October 27, 1963.

MAKEYEV, P.S.

Natural conditions of Paleolith based on archaeological data.  
Prirod. obst. i fauny prosh. no.1 31-65 '63. (MIRA 17:8)

MAKEYEV, P.S.

Hypothesis of glaciers. Dokl. na nauch. konf. 1 no.4:143-146  
'62. (MIRA 16:8)  
(Glaciology)

PIDOPLICHKO, Ivan Grigor'yevich; MAKHEEV, Pavel Semenovich; MARKEVICH,  
A.P., akademik, otv.red.; GRUDZINSKAYA, O.S., red.izd-va;  
MATVEYCHUK, A.A., tekhn.red.

[Climates and land forms of the past] O klimatakh i land-  
shaftakh proshloga. Kiev, Izd-vo Akad.nauk USSR. No.3.  
1959. 140 p. (MIRA 12:8)

1. AN USSR (for Markevich).  
(Paleogeography)

MAKEYEV, P.S.

Division of Central Asia into physical geographical regions. Vop.  
geog. no.39:151-167 '56. (MLRA 9:11)  
(Soviet Central Asia--Physical Geography)

MAKEYEV, Pavel Semenovich; LYUBIMOV, I.M., redaktor; NOGINA, N.I., tekhnicheskiy redaktor; MAL'CHEVSKIY, G.N., redaktor kart

[Natural zones and geographical landscapes] Prirodnye zony i landshafty. Moskva, Gos. izd-vo geogr. lit-ry, 1956. 319 p. (MIRA 10:4)  
(Physical geography)

ZOLOTAREV, M.A.----(continued) Card 2.

16. Laboratoriya gidro-geologicheskikh problem AN SSSR (for Gordeyev).  
17. Institut geografii AN SSSR (for Dumitashko, Grichuk).

(Paleontology) (Paleobotany) (Glacial epoch)

ZOLOTAREV, M.A.; PUDOPLICHKO, I.C.; FEDOROV, P.V.; VASIL'YEV, V.N.; IVANOVA, I.K.; GROMOV, V.I.; SOKOLOV, D.S.; ZHIRMUNSKIY, A.M.; PARMUZIN, Yu.P.; PLYUSHNIN, I.I.; KATS, N.Ya.; GRICHUK, V.P.; YEFREMOV, Yu.K.; MOSKVITIN, A.I.; LEBEDEV, V.D.; TEODOROVICH, G.I.; ZVORYKIN, K.V.; MIKHNOVICH, V.P.; GALITSKIY, V.V.; MAKEYEV, P.S.; NIKIFOROVA, K.V.; GORDEYEV, D.I.; YANSHIN, A.L.; DUMITRASHKO, N.V.; SHANTSER, Ye.V.; P'yAVCHENKO, N.I.; FLEROV, K.K.; PUDOPLICHKO, I.G., doktor biologicheskikh nauk, professor.

Papers presented at the conference on the history of Quaternary flora and fauna in relation re the development of Quaternary glaciation.  
Trudy Kem. chetv. per. 12:129-189 '55. (MIRA 9:4)

1.Gidrometeosluzhba (for Zeletarev).2.Zeolegicheskiy institut AN USSR (for Pideplichko).3.Institut okeanologii AN SSSR (for Fedorov).4.Batnicheskiy institut AN SSSR (for Vasil'yev).5.Komissiya po izucheniyu chetvertichnogo perioda AN SSSR (for Ivaneva).6.Institut geologicheskikh nauk AN SSSR (for Gromov, Yanshin, Nikiforova, Moskvitin).7.Moskovskiy geologo-razvedochnyy institut imeni Ordzhonikidze (for Sokolov).8.Akademiya nauk Belorusskoy SSR (for Zhirmunskiy).9.Moskovskiy institut inzhenerov vodnogo khozyaystva (for Plyushnin).10.Geograficheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta (for Yefremov, Parmuzin).11.Moskovskiy gosudarstvennyy universitet (for Lebedev, Zver'kin).12.Institut nefti AN SSSR (for Teodorevich).13.Transproektka'yer Ministerstva putey soobshcheniya (for Mikhnovich).14.Vsesoyuznyy aero-geologicheskiy trest (for Galitskiy).15.Sovet po izucheniyu proizvoditel'nykh sil AN SSSR (for Makeyev).

(Continued on next card)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031500017-6

Soviet Recognition		P.S.
Date 1/1	Pub.	45 - 8/14
Author(s)		Markov, P. S.
Title		Critique of the book entitled, "Antiglacialism"
Periodical	Izv. AM SSSR, Ser. geog. 6, 69 - 76, Nov-Dec 1955	
Abstract		Critical review is presented of a book by K. I. Markov entitled, "Antiglacialism" read during the 4-th semester of the Moscow State University in November 1954. Twenty-four references: 23 Russ. and USSR and 1 Germ. (1876-1955).
Publication		
Submitted		

PIDOPLICHKO, Ivan Grigor'yevich; MAKEYEV, Pavel Semenovich; MARKEVICH, A.P.,  
otvetstvennyy redaktor; GRUDZINSKAYA, O.S., redaktor izdatel'stva;  
SIVACHENKO, Ye.K., tekhnicheskiy redaktor

[Climates and landscapes of past ages] O klimatakh i landshaftakh  
proshlogo. Kiev, Izd-vo Akademii nauk USSR. No.2. 1955. 172 p.  
(MIRA 9:10)

1. Chlen-korrespondent AN USSR (for Markevich)  
(Paleogeography) (Climatology)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031500017-6

MAKHYEV, P.S.

System of natural zones, Izv. Vses. geog. ob-va 86 no.5:403-411  
5-0 '54. (MIRA 7:10)

(Physical geography)

PIDOPLYCHKO, I.G.; MAKHNEV, P.S.

Reply to D.G.Panov's review. Izv.AN SSSR Ser.geog. no.6:88-90 N-D '53.  
(MLRA 6:12)  
(Paleoclimatology)

1. MAKEYEV, P. S.
2. USSR (600)
4. Dzhany-Darya - Irrigation
7. Ancient irrigation lands in the dry river beds of the Kunya Darya and the Dzhany Darya, Izv. Vses. geog. obshch., 84, No. 6, 1952.
9. Monthly List of Russian Accessions, Library of Congress, March, 1953. Unclassified.

MAKEYEV, P. S.

"Physical Geography of the USSR,"

SO: Iz. v-s. Geograf. Obshch., 80, No. 3, 1948.

MAKEYEV, P. S.

PA 162T50

USSR/Geophysics - Soil Studies Jul/Aug '48  
Erosion

"Regularities in the Intensity of Erosion From the Surface of Mountain Regions of Central Asia," P. S. Makeyev

"Meteorol i Gidrol" No 4, pp 95-98

V. L. Shul'ts in article, "The Intensity of Erosion From the Surface of the Mountain Region of Central Asia" ("Meteorol i Gidrol" No 1, 1947) gave six reasons for high erosion in southern parts of mountain regions of Central Asia. Makeyev takes issue with all these reasons and adds that most important factor--lithological composition of rocks making up watersheds of rivers and their channels-- has been omitted. Submitted 15 Aug 47.

162T50

MAKEIEV, P. S. OSU-A 341

Materialy po Geomorfologii Basseyyna r Izhmy:  
Materials on the Geomorphology of the river  
Izma Basin.

Trudy Instituta Fizicheskoy Geografii, No. 16,  
1935, pp. 7-89.

Library of Congress, GB236-A4  
90 references, English summary

Description of the river Izma (North Ural),  
barometric altitudes, description of the map,  
etc. Sketch maps of six points on the river,  
scale 1:30,000.

(21)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031500017-6

MAKEYEV, P.

Role of the military power of the U.S.S.R. in preventing  
war. Izv. AN Latv. SSR no.5:3-14 '63. (MIRA 17:1)

MAKEYEV, G.V.; YEFIMOV, M.V.

Conference on the biological role of trace elements in the  
organism of man and animals in Western Siberia and the  
Far East. Izv. Sib. otd. AN SSSR no. 3109-111 KZ (MIRA 1243)

MAKEYEV, O.V., doktor geol.-miner. nauk, prof., otd. red.;  
IVANOV, A.D., otd. red.

[Abstracts of reports of the First Scientific and Practical Conference on the Control of Soil Erosion in the Buryat A.S.S.R.] Tezisy dokladov Pervoi nauchno-proizvodstvennoi konferentsii po bor'be s eroziей почв v Buriatskoj ASSR. Ulan-Ude, AN SSSR Sibirskoe otd-je. No.1. 1963.  
94 p. (MLIA 17:6)

Nauchno-proizvodstvennaya konferentsiya po bor'be s eroziей почв v Buryatskoj ASSR. Lst, 1963. 2. Buryatskiy kompleksnyy nauchno-issledovatel'skiy institut Sibirskogo otdeleniya AN SSSR.

MARTYNOV, V.P.; MAKEYEV, O.V., doktor geol.-miner. nauk, otv. red.

[Soils in the Lake Baikal mountain region] Pochvy gornogo  
Pribaikals'ia. Ulan-Ude, Buriatskoe knizhnoe izd-vo, 1965.  
164. p. (MIRA 18:11)

MAKEYEV, O.V., prof., otv. red.; TOKOVOY, N.A., prof., red.;  
YEFIMOV, M.V., dots., red.; BAKHANOVA, S.G., red.;  
IVANOV, G.M., red.

[Biological role of microelements in the organism of man and animals in eastern Siberia and the Far East; transactions of the conference in Ula-Ude in February of 1962] Biologicheskaiia rol' mikroelementov v organizme cheloveka i zhivotnykh Vostochnoi Sibiri i Dal'nego Vostoka; trudy konferentsii, g. Ulan-Ude, fevral' 1962 g. Ulan-Ude, Buriatskii kompleksnyi nauchno-issledovatel'skiy institut, 1963. 162 p. (MIRA 18t1)

1. Buryatskiy kompleksnyy nauchno-issledovatel'skiy institut (for Yefimov, Bakhanova).

MAKEYEV, O.V., doktor geol.-miner. nauk, otv. red.; YEFIMOV, M.V.,  
kand. biol. nauk, red.; TOKOVY, N.A., doktor sel'khoz.  
nauk, red.; SKRIPCHENKO, A.F., kand. sel'khoz. nauk,  
red.; BAKHANOVA, S.G., red.

[Use of trace elements in the agriculture of Eastern Siberia  
and the Far East] Primenenie mikroelementov v sel'skom kho-  
ziaistve Vostochnoi Sibiri i Dal'nego Vostoka. Ulan-Ude, 1962.  
133 p. (MIRA 17:6)

I. Ulan-Ude. Buryatskiy kompleksnyy nauchno-issledovatel'skiy  
institut.

MAKEIEV, O.V.; NOGINA, N.A.

Classification and identification of soils in Central and Eastern  
Siberia. Krat.sob. EKNII no.3:65-72 '62. (MIRA 16:5)  
(Siberia--Soils--Classification)

D.  
M.

MAKEYEV, O.V.; IVANOV, A.D.

Soil erosion by water and winds in the Buryat A.S.S.R. and zonal  
characteristics of erosion-preventing measures. Kraeved. sbor.  
no.6:15-24 '61. (MIRA 15;2)

(Buryat-Mongolia--Erosion)

MAKEYEV, O.V., prof., otv. red.; DMITRIYEV, V.F., prof., red.; YEGOROV, A.D., prof., red.; YEFIMOV, M.V., dots., red.; OZHIGOV, Ye.P., kand. khim. nauk, red.; BOGDANOV, G.G., red. izd-va; BARER, S.N., tekhn. red.

[Microelements in soils, waters and organisms of Eastern Siberia and the Far East and their role in the life of plants, animals and man] Mikroelementy v pochvakh, vodakh i organizmakh Vostochnoi Sibiri i Dal'nego Vostoka i ikh rol' v zhizni rastenii, zhivotnykh i cheloveka; trudy. Ulan-Ude, Buriatskii kompleksnyi nauchno-issl. in-t, 1961. 275 p. (MIRA 16:1)

1. Konferentsiya po mikroelementam v pochvakh, rastitel'nykh i zhivotnykh organizmakh Vostochnoy Sibiri i Dal'nego Vostoka. 1st, Ulan-Ude, 1960.

(Siberia, Eastern--Trace elements)

MAKEYEV, O.V.

Swamp and meadow soils of Tunka trough in the Buryat A.S.S.R.  
Trudy BONII no.419-37 '60. (MIRA 15:3)  
(Baikal Lake region--Soils)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031500017-6

MAKEYEV, O.V.; NADEZHDIN, P.V.

Problems of the soil geography of Eastern Siberia. Trudy BKNII  
no.4:7-18 '60. (MIRA 15:3)  
(Siberia, Eastern—Soils)

MAKEYEV, O.V.

Controlling draughts and soil erosion and problems of soil research  
in the Buryat A.S.S.R. Trudy BKNII no.2:141-152 '60. (MIRA 14:10)  
(Buryat-Mongolia--Soils)

KORZUN, Mikhail Adamovich; MAKELEV, Oleg Vladimirovich; NOGINA, Nina  
Aleksseyevna; UFDIMTSVA, Klavdiya Andreyevna; SUMKIN, A.N.,  
red.; SKRILEV, A.F., tekhn.red.

[Soil zoning in the Lake Baikal portion of Siberia] Pochvennoe  
raionirovanie Baikal'skoi Sibiri. Ulan-Ude, Buriatskii kompleksnyi  
nauchno-issl.in-t, 1960. 66 p. (MIRA 14:3)  
(Baikal Lake region--Soils)

REMEZOV, N.P.; MAKEYEV, O.V.

Concept of a "soil type." Nauch.dokl.vys.shkoly; biol.nauki  
no.3:204-211 '59. (AIRA 12:10)

1. Rekomendovana kafedroy pochvovedeniya Moskovskogo gosudar-  
stvennogo universiteta im. M.V.Lomonosova.  
(Soils--Classification)

MAKEYEV, O.V.

Classification of soils in the south of central Siberia. Krat.  
soob. BKNII no.1:42-44 '59. (MIRA 14:9)  
(Siberia--Soils--Classification)

MAKEYEV, Oleg Vladimirovich; REMEZOV, N.P., prof., doktor geologo-mineralogicheskikh nauk, otd. red. VOROB'YEVA, N.P., red.;  
PROMHOROV, A.I., tekhn. red.

[Turf soils of the taiga in the southern part of Central  
Siberia; their genesis properties, and efficient utilization]  
Dernovye taezhnye pochvy iuga Srednei Sibiri; genetika, svoistva  
i puti ratsional'nogo ispol'zovaniia. Ulan-Ude, knizhnoe izd-  
vo, 1959. 346 p. (MIRA 14:5)

1. Moskovskiy gosudarsvennyy universitet imeni M.V.Lomonosova  
(for Remezov)  
(Siberia--Soils) (Taigas)

USSR/Soil Science - Genesis and Geography of Soils. J

Abs Jour : Ref Zhur Biol., № 22, 1958, 99968

Author : Makeyev, O.V.

Inst :

Title : Genetic Soil Series (Discussion).

Orig Pub : Pochvovedeniye, 1957, № 12, 79-82

Abstract : A genetic soil series is defined as a "complex of taxonomic units of a definite rank entering into a higher taxonomic unit in relation to it". The following categories of soil genetic series are proposed: evolutionary (natural and cultivated), topographic and zonal (modern and paleozonal) series.

Card 1/1

MAKEYEV, O.V.

Genesis of taiga soils in the southern part of Central Siberia.  
Izv. AN SSSR. Ser.biol. no.4:416-430 Jl-Ag '57. (MLRA 10:8)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova i  
Biologo-pochvennyy fakul'tet kavedra pochvovedeniya  
(SIBERIA--SOIL FORMATION) (TAIGA)

MAKEYEV, O. V., Doc Biol Sci -- (diss) "Turfy-taiga soils of  
central Siberia (genesis, properties, and ways of  
rational utilization)." Mos, 1957. 36 pp (Mos Order of Lenin  
and Order of Labor Red Banner State Univ im M. V. Lomonosov),  
150 copies. ~~XXXXXX~~ List of author's works, p 36 (KL, 2-58,  
112)

USSR / Soil Science. Physical and Chemical Properties of Soils. J-2

Abs Jour : Ref Zhur - Biologiya, No 16, 1958, No. 72687

content of all forms of acid soluble phosphates even in the first year, while on an analogous plot of turf-carbonate alkali soil, the content of acetic and carbonic acid-soluble forms is increased in the first year, the quantity of the hydrochloric acid-soluble phosphates increased markedly only in the following year. Early (middle August) raising of a grass cover, fallowing and application of phosphorus fertilizers on fallow, under autumn plowing and before sowing is recommended. It is expedient to plow grey forest soils once in 4-5 years in depth (30 cm). -- L. N. Kudryashova

Card 2/2

USSR / Soil Science. Physical and Chemical Properties of Soils. J-2

Abs Jour : Ref Zhur - Biologiya, No 16, 1958, No. 72687

Author : Makeyev, O. V.  
Inst : Moscow University - Chair of Soil Science  
Title : On Transformations of Forms of Soil Phosphates in the  
Grey Forest and Turf-Carbonate Soils of Central Siberia

Orig Pub : Vestn. Mosk. Un-ta Ser. biol., pochvoved., geol., i zogr.,  
1956, No 2, 113-124

Abstract : Results are cited of investigations of soil phosphates in  
grey forest and turf-carbonate soils of Irkutskaya Oblast.  
Significant changes were observed of the processes of  
transformation of P compounds in the upper soil layer.  
In the plowed layer of dark-grey soil, the accumulation of  
 $P_2O_5$  can reach ~700, in the turf-carbonate ~200 kg/ha.  
The application of basic fertilizer in the fallow field  
of the long plowed dark-grey weakly-acid soil increases the

Card 1/2

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031500017-6

MAKEYEV, N. Ya., inzhener.

Determining voltage losses (in per cent) per 1 a/km. in three-phase lines  
using wires with aluminum core. Prom.energ. 10 no.5:24 My '53. (MLRA 6:5)  
(Electric lines--Testing)

1. MAKEYEV, N.YA.
2. USSR (600)
4. Electric Lines
7. Determining voltage losses of three-phase cable lines with aluminum cores, Rab.energ.  
3 no. 4, 1953.

9. Monthly List of Russian Accessions, Library of Congress, APRIL 1953, Uncl.

ACC NR: AR6023239

SOURCE CODE: UR/0044/66/000/003/B070/B070

AUTHOR: Makeyev, N. N.

TITLE: Eccentric collision of gas streams

SOURCE: Ref. zh. Matematika, Abs. 3B358

REF SOURCE: Sb. aspirantsk. rabot. Kazansk. un-t. Matem., mekhan., fiz. Kazan',  
1964, 116-122

TOPIC TAGS: gas flow, gas kinetics, flow velocity

ABSTRACT: The plane problem of collision of two nonviscous gas streams flowing in parallel-walled channels is solved. The channels can have different widths and parallel axes but cannot coincide with each other; the flow is asymmetrical, and its velocity is lower than that of sound. The author has followed the S. A. Chaplygin method, developed by S. V. Fal'kovich for problems with several characteristic velocities. [Translation of abstract] M. Gurevich

SUB CODE: 20

Card 1/1

UDC: 517.9:533.7

L 2780-66

ACCESSION NR: AP5021533

help of Legendre series of the first order. The author thanks G. G. Tumashev for his help. Orig. art. has: 2 figures and 25 formulas.

ASSOCIATION: none

SUBMITTED: 20Mar64

ENCL: 00

SUB CODE: ME,  
MA

NO REF Sov: 006

OTHER: 006

Card 3/3 1/2

L 2780-66  
ACCESSION NR: AP5021533

stationary base can be written as

$$\frac{\partial^2 x}{\partial t^2} - \frac{\partial^2 x}{\partial s^2} + \frac{u}{s} \frac{\partial x}{\partial s} = 0, \quad \bar{a} = (s - x) \beta,$$

where the coordinates are now

$$x = \frac{1}{2\beta} s \frac{\partial x}{\partial s}, \quad y = 2\beta s - \frac{1}{2\beta} \frac{\partial x}{\partial s}.$$

According to V. A. Smirnov (Ob istochnikii ploskoy giperzvukovoy strui v pokoyashchuyusya sredu, Prikl. matem. i mekh., t. 24, vyp. 5, 1960), these expressions are only approximately true for hypersonic plane flow, i.e., for

$$n \ll 1, \quad \epsilon \ll 1, \quad h = \sqrt{\frac{x+1}{x-1}}.$$

After changing to characteristic coordinates, the general boundary solution of the above equations (which represent the Euler-Poisson equations) can be obtained as a contour integral. By using the solution of Darbu based on the Riemann method and the boundary conditions, the general solution of the equations is obtained in terms of some lengthy integrals, i.e.,  $x = f(r, s, \text{etc.})$ ,  $y = g(r, s, \text{etc.})$ . After several variable transformations and restriction to

$\lambda = 2$  for diatomic gas,  $\lambda = 0$  for monatomic gas) which includes  $\lambda = 1.33, 1.25, \text{etc.}$ , as well as  $\lambda = 3, 5/3, \text{etc.}$ , these integrals are shown to be solvable with the

Card 2/3

<u>L 2780-66</u>	EWT(1)/EWP(m)/EWA(d)/FCS(k)/EWA(1)
ACCESSION NR:	AP5021533
AUTHOR:	<u>Makseyev, N. N. (Kazan)</u>

UR/0258/65/005/004/0756/0761  
533.6.011

51

50

B

TITLE: On the theory of simple wave interaction

SOURCE: Inzhenernyy zhurnal, v. 5, no. 4, 1965, 756-761

TOPIC TAGS: compressible flow, hypersonic flow, plane wave, wave interaction

ABSTRACT: Basing his work on the Riman theory (B. Riman. O rasprcstranenii ploskikh voln konechnyy amplitudy. Sochineniya, Gostekhizdat, 1948), the author analyzes the interaction of simple waves in a polytropic gas. Since the general case of simple wave interactions has been solved by Landau and others (L. D. Landau and E. M. Lifshits. Mekhanika sploshnykh sred. Gostekhizdat, 1953) for discrete values of  $x = c/pv$  (i.e.,  $x = 3, 5/3, 7/5$  etc), the present paper discusses the case of arbitrary values of  $x$ . The particular application is hypersonic flow of an ideal gas from a plane channel into a stationary liquid at a lower pressure. Based on the characteristic function

$$\chi(x, t) = \psi - \omega x + i\left(\frac{\omega}{2} + t\right),$$

found by Landau for the nonstationary case, the equation for the two-dimensional

Card 1/3

I 4C874a56

ACC NR: AR6014919

Tricomi problem for the study of supersonic and transsonic jet flow. Neither numerical nor graphical material which could illustrate the solution of the posed problem is presented in the article. Bibliography of 8 citations. Yu. A. Lashkov  
[Translation of abstract]

SUB CODE: 20

Card 2/2

11b

L 40874-66 EWT(d)/EWT(1)/EWP(m)/EWT(m)/EWP(f)/T-2

ACC NR: AR6014919

SOURCE CODE: UR/0124/65/000/011/B045/B045

AUTHOR: Makeyev, N. N.

TITLE: Eccentric impact of gas jets

SOURCE: Ref. zh. Mekhanika, Abs. 11B300

REF SOURCE: Sb. aspirantsk. rabot. Kazansk. un-t. Matem., mekhan., fiz. Kazan', 1964, 116-122

TOPIC TAGS: gas jet, near sonic flow, Dirichlet problem, flow velocity, ideal fluid

ABSTRACT: The exact solution is considered for the two-dimensional problem of the eccentric impact of two gas jets of an ideal compressible fluid. These jets flow with near-sonic velocities from channels of finite width with parallel walls into a stationary medium of the same composition. The angle between the directions of the velocities of the colliding jets is  $180^\circ$ . The solution of the posed problem is constructed on the basis of the Chaplygin theory generalized to the case of many characteristic velocities. By introducing the Chaplygin variables the considered problem is reduced to the Dirichlet problem for the Chaplygin equation whose solution is sought in series form. Relations are obtained for determining the compression coefficient and ejection angle of the jets. A short table is compiled for the values of the Cherri function and its derivatives, which are necessary to determine the velocity field of the jets. This table can be used for the numerical solution of the

Card 1/2

On a case of central motion

S/033/62/039/005/009/011  
E032/E314

the angular velocity and  $\varphi$  and  $g$  are continuous functions.  
 Next, it is assumed that the components of the reactive  
 acceleration are

$$\begin{aligned} a_r &= \frac{S'(t)}{S(t)} \left( \alpha - \frac{dr}{dt} \right), \\ a_\theta &= \frac{S'(t)}{S(t)} \left( \beta - \omega r \right). \end{aligned} \quad (4)$$

where  $\alpha$  and  $\beta$  are constants. The equations of motion are  
 then of the form

$$\frac{d^2r}{dt^2} - r\omega^2 = -\frac{\lambda}{r^2} - \frac{S'(t)}{S(t)} \left( \alpha - \frac{dr}{dt} \right) - \frac{F}{m_0 S(t)}, \quad (5)$$

$$\frac{1}{r} \frac{d}{dt} (r^2 \omega) = -\frac{S'(t)}{S(t)} \left( \beta - \omega r \right) - \frac{G}{m_0 S(t)}. \quad (6)$$

These equations are then solved and expressions are obtained, in  
 a closed form, for the trajectory and the area integral.

ASSOCIATION: Saratovskiy gos. universitet im. N.G.Chernyshevskogo  
 (Saratov State University im. N.G.Chernyshevskiy)

SUBMITTED: July 4, 1961

Card 2/2

3 9200

41195  
S/033/62/039/005/009/011  
E032/E314

AUTHOR: Makeyev, N.N.

TITLE: On a case of central motion

PERIODICAL: Astronomicheskiy zhurnal, v. 39, no. 5, 1962,  
927 - 930

TEXT: This paper is concerned with the motion of a mass point with a variable mass  $m = m_0 S(t)$ ,  $0 < S(t) \leq 1$ , where  $S(t)$  is a continuous function of time and the motion takes place in the gravitational field of a central body with a very rarefied atmosphere. Since the density of the medium is small, it is shown that the Reynolds number is also small, provided the velocity of motion is sufficiently high. Leif N. Persen (Jet Propulsion, 28, no. 11, 1958, 750) assumed that  $Re$  was small in a similar problem but did not justify this assumption. The radial and transverse components of atmospheric resistance are assumed to be of the form  $F = F_o [\psi(\theta)] / r^2 (dr/dt)$ ,  $G = G_o g(\theta) (r\omega/r^2)$ , where  $F_o$  and  $G_o$  are constants,  $\omega$  is

Card 1/2

On the collision of gas jets

S/040/62/026/u02/u12/025  
D299/D301

nals of Mathematics, 1945, v. 46, no. I, 144-157.

SUBMITTED: October 26, 1961

Card 4/4

f

S/040/62/026/002/012/025  
D299/D301

On the collision of gas jets

If  $\tau_0 = \tau_s$ , it is possible to use F.I. Frankl's asymptotic expansion for Chaplygin's function, viz.:

$$x_n(\tau_s) = \frac{C_0}{(2n)^{1/3}} + \frac{C_1}{2n} + \frac{C_2}{(2n)^{5/3}} + \frac{C_3}{(2n)^{7/3}} + O\left(\frac{1}{n}\right); \quad (2.9)$$

the coefficients in Eq. (2.9) were calculated by S.V. Falkovich (Ref. 13: Asimptoticheskoye razlozheniye funktsii Chaplygina. Izv. vuzov, ser. matemat., 1960, no. 2 (15), 209-212). The angle of efflux  $m$  of the jet (Eq. 2.4), is calculated by means of Euler's theorem. Further, a formula is obtained for the length of the section at which the velocities of flow are equalized. The above results can be extended to the case when the channel walls are at an angle  $q\pi$  ( $q < 1$ ). There are 4 figures and 15 references: 13 Soviet-bloc and 2 non-Soviet-bloc. The references to the English-language publications read as follows: T.M. Cherry. Asymptotic Expansions for the Hypergeometric Functions Occurring in Gas-Flow Theory. Proc. Roy. Soc., 1950, ser. A, v. 202, no. 1071; C. Truesdell, On a function which occurs in the theory of the Structure of polymers, An-

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On the collision of gas jets

is introduced and the stream function  $\Psi_3$  is considered. The coefficient of contraction  $K$  of a nonsymmetrical jet is defined as the ratio of the smallest cross-sectional area of the jet, to the projection of the orifice BC on the  $\eta$ -axis, viz.:

$$K = \frac{d_0}{2h \sin m}. \quad (2.2)$$

By virtue of another formula, one obtains

$$\frac{1}{K} = \sin m \left( \frac{2}{\pi} \sum_{n=1}^{\infty} \frac{4n}{4n^2 - 1} \chi_n'(\tau_0) + \sin m \right) - \frac{d_1 - d_2}{2d_0} \cos m \quad (2.4)$$

where  $\chi_n'(\tau_0) = -x_n(\tau_0) \cos 2nm + \sigma_1 \left( \frac{1-\tau_0}{1-\tau_1} \right)^{\beta} \frac{Z_n(\tau_1)}{Z_n(\tau_0)} x_n(\tau_1) + \sigma_2 \left( \frac{1-\tau_0}{1-\tau_2} \right)^{\beta} \frac{Z_n(\tau_2)}{Z_n(\tau_0)} x_n(\tau_2)$

Several particular cases are considered, resulting from Eq. (2.4). Thus, for infinitely wide channel one obtains

$$\frac{1}{K} = \sin m \left( \sin m - \frac{2}{\pi} \sum_{n=1}^{\infty} \frac{4n}{4n^2 - 1} x_n(\tau_0) \cos 2nm \right) \left( 1 + \frac{d_1 - d_2}{4h} \operatorname{ctg} m \right)^{-1} \quad (2.6)$$

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